Interview Summary	Application No.	Applicant(s)	
	10/780,296	WILSON ET AL.	
	Examiner	Art Unit	
	Mark L. Berch	1624	

All participants (applicant, applicant's representative, PTO personnel):

(1) *Mark L. Berch*. (3)_____.

(2) *Jeffrey Childers*. (4)_____.

Date of Interview: *20 October 2006*.

Type: a)☒ Telephonic b)☐ Video Conference
c)☐ Personal [copy given to: 1)☐ applicant 2)☐ applicant's representative]

Exhibit shown or demonstration conducted: d)☐ Yes e)☐ No.
If Yes, brief description: _____.

Claim(s) discussed: *All*.

Identification of prior art discussed: _____.

Agreement with respect to the claims f)☐ was reached. g)☒ was not reached. h)☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: *Proposed fax amendment reviewed. It would overcome all rejections. Several species in Claim 17 has "sulfonoxy" and it would be likely that sulfo was actually intended.* .

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Mark Berch
Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)
In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

ALSTON&BIRD LLP

3201 Beechleaf Court, Suite 600
Raleigh, NC 27604-1062

919-862-2200
Fax: 919-862-2260

TELECOPY

PLEASE DELIVER AS SOON AS POSSIBLE

DATE: October 19, 2006

TO: TC 1600

FROM: Jeffrey W. Childers, Ph.D.

Appl. No.: 10/780,296 Confirmation No.: 9724
Applicant(s): Wilson *et al.*
Filed: 2/17/04
Art Unit: 1624
Examiner: M. Berch
Title: A1 ADENOSINE RECEPTOR ANTAGONISTS

Attachments
Examiner Interview Request(1 page)
Draft Amendment(14 pages)

NO. OF PAGES: 16
(Including cover page)

OPERATOR:

IF NOT RECEIVED PROPERLY, PLEASE NOTIFY ME IMMEDIATELY AT (919) 862-2200

USER CODE: LAKE FAX NUMBER: 571-273-0663
CLIENT/MATTER: 049542/283879
REQUESTED BY: Pam Lockley VOICE NUMBER:

RTA01/2110098v1

PTOL-413A (12-02)
Approved for use through xx/xx/xxxx OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 10/780,296 First Named Applicant: Wilson *et al.*
Examiner: Mark Berch Art Unit: 1624 Status of Application: Pending

Tentative Participants:
(1) Jeffrey W. Childers **(2) Examiner Mark L. Berch**

(3) **(4)**

Proposed Date of Interview: 10/20/06 **Proposed Time: 11:30 (AM)**

Type of Interview Requested:
(1) ☒ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☐ NO
If yes, provide brief description:

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1)112, 2nd¶	1-4, 12-14, 18		☐	☐	☐
(2)112, 1st¶	1-7, 12-16, 18		☐	☐	☐
(3)112, 1st¶	1-8, 12-18		☐	☐	☐
(4)Double Patenting	1-8, 12-18		☐	☐	☐

☐ Continuation Sheet Attached

Brief Description of Arguments to be Presented:

Applicants submit that proposed claim amendments put claims in condition for allowance and respectfully request the same.

An interview was conducted on the above-identified application on _____.

NOTE:
This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).
This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR1.133(b)) as soon as possible.

_____ _____
(Applicant/Applicant's Representative Signature) (Examiner/SPE Signature)
I.EGAL01/13023102v1

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PATENT

FOR PURPOSES OF INTERVIEW ONLY
DO NOT ENTER

RESPONSE UNDER 37 C.F.R. 1.116 - EXPEDITED
PROCEDURE - EXAMINING GROUP 1624

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.:	10/780,296	Confirmation No.: 9724
Applicant(s):	Wilson et al.	
Filed:	February 17, 2004	
Art Unit:	1624	
Examiner:	Berch, Mark L.	
Title:	A_1 ADENOSINE RECEPTOR ANTAGONISTS	

Docket No.: 5623-13 (049542/283879)
Customer No.: 00826

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT AFTER FINAL UNDER 37 CFR § 1.116

Sir:

In response to the Final Office Action dated July 20, 2006, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims beginning on page 2 of this paper.

Remarks/Arguments begin on page 9 of this paper.

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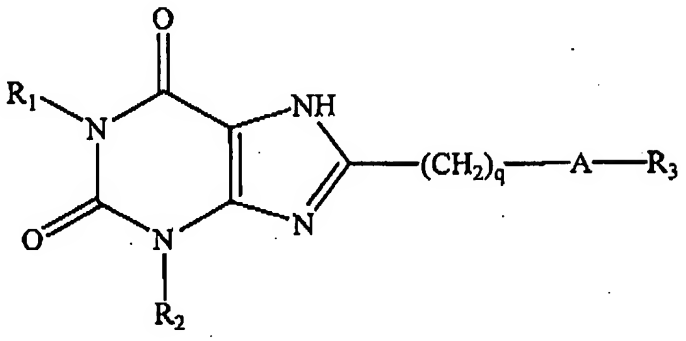
Amdt. dated 10/03/2006
Reply to Office action of July 20, 2006

Amendments to the Claims:

1. (Currently amended) A compound of formula (I):



(I)

wherein:

A is a 5- or 6-membered heteroaromatic ring containing 1 to 4 heteroatoms selected from the group consisting of N, O, and S;

R_2 is of the formula (i):

$$(CH_2)r\text{———}A'\text{——}R_4 \qquad \text{(i)}$$

wherein:

A' is a 6-membered aromatic ring or heteroaromatic ring containing [[0]] 1 to 4 nitrogen atoms ~~heteroatoms selected from the group consisting of N, O, and S;~~

r is an integer ranging from 1 to 20;

R_4 is selected from the group consisting of H; NH_2; $(CH_2)_SOH$, wherein s is an integer ranging from 1 to 8; [[COOH;]] $R_{14}COOH$, wherein R_{14} is an alkylene or alkylidene group having 1 to 8 carbon atoms; halo, NHR_8, NR_8R_9, $NHCOR_8$, NR_8COR_9, SO_3H and PO_3H_2;

R_3 is selected from the group consisting of H, NH_2, $R_{15}COOH$, wherein R_{15} is an alkylene or alkylidene group having 1 to 8 carbon atoms, and $(CH_2)_tOH$, wherein t is an integer ranging from 1 to 8; halo, NHR_8, NR_8R_9, $NHCOR_8$, NR_8COR_9, SO_3H and PO_3H_2;

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q is an integer ranging from 1 to 8; and

R_1 is a C_1-C_8 alkanyl group, C_2-C_8-alkenyl- or C_2-C_8-alkynyl- group which is optionally substituted by -CN, -$CH_2NR_6R_7OH$, -OR_8, -NR_6R_7, -$NHCOR_8$, $NHCONR_6R_7$, halogen, -$OCOR_8$, -OCH_2COOH, -OCH_2COOR_8, -SO_2R_5, -S-R_5, -OCH_2-$CONR_6R_7$, -OCH_2CH_2OH, -SO_2-CH_2-CH_2-O-COR_8, -OCH_2-CH_2-NR_6R_7, -SO_2-CH_2-CH_2-OH, -$CONHSO_2R_8$, -$CH_2CONHSO_2R_8$, -$OCH_2CH_2OR_8$, -COOH, --$COOR_8$, -$CONR_6R_7$, -CHO, -SR_8, -SOR_8,-SO_2R_8, -SO_3H, -PO_3H_2, -$SO_2NR_6R_7$, -OCH_2-CH_2OCOR_8, -CH=NOH, -CH=NOR_8, -COR_9, -$CH(OH)R_9$, -$CH(OR_8)_2$, -CH=CH-R_{10}, -$OCONR_6R_7$,

R_5 is C_1-C_4-alkyl, optionally substituted by OH, $OCOR_8$, NH_2, NR_6R_7 or $NHCOR_8$,

R_6[[,]] and R_7, ~~and R_8~~ are each independently hydrogen, an optionally substituted C_{3-6}-cycloalkyl group, a branched or unbranched alkyl-, alkenyl- or alkynyl group having up to 10 carbon atoms, which may optionally be substituted by hydroxy, phenyl, substituted phenyl, amino~~, amino substituted with C_1 to C_8 alkyl~~, or it denotes --$(CH_2)_m$-$NHCOOR_8$ wherein m=1, 2, 3 or 4;

R_8 is hydrogen, C_1-C_8-alkyl or C_2-C_8-alkenyl or C_2-C_8-alkynyl optionally substituted with CO_2H, a benzyl- or phenyl- group, which is optionally mono- or polysubstituted by OCH_3;

R_9 is C_1-C_8-alkyl or C_2-C_8-alkenyl or C_2-C_8-alkynyl optionally substituted with CO_2H, optionally substituted phenyl, optionally substituted benzyl, C_3-C_6-cycloalkyl, and

R_{10} is –$COOR_8$, -CH_2OR_8, -$CONR_6R_7$, hydrogen, C_1-C_3-alkyl, optionally substituted phenyl, --$CH_2NR_6R_7$;

and pharmaceutically acceptable salts, ~~hydrates~~ and prodrugs thereof.

2. (Original) The compound of claim 1, wherein at least one of R_3 and R_4 is independently selected from the group consisting of SO_3H and PO_3H_2.

3. (Previously presented) The compound of claim 1, wherein R_1 is a C_1-C_8 alkanyl group, C_2-C_8-alkenyl group or C_2-C_8 alkynyl group which is optionally substituted by NR_6R_7, -SO_3H, or -PO_3H_2.

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4. (Previously presented) The compound of claim 1, wherein A is selected from the group selected from the group consisting of pyridyl, thiophenyl, thiazolyl, and tetrazolyl.

5. (Original) The compound of claim 1, wherein A' is phenyl.

6. (Previously presented) The compound of claim 1, wherein:

R_1 is a C_1-C_8 alkanyl group, C_2-C_8-alkenyl group or C_2-C_8 alkynyl group which is optionally substituted by NR_6R_7 or -SO_3H;

A is selected from the group selected from the group consisting of pyridyl, thiophenyl, thiazolyl, and tetrazolyl; and

A' is phenyl.

7. (Original) The compound of claim 6, wherein at least one of R_3 and R_4 is independently selected from the group consisting of SO_3H and PO_3H_2.

8. (Currently amended) The compound of claim 1, wherein said compound is selected from the group consisting of:

3-[2-(4-Aminophenyl)ethyl]-1-propyl-8-[(3-pyridyl)methyl]xanthine;

3-[2-(4-Aminophenyl)ethyl]-1-propyl-8-[(4-thiazolyl)methyl]xanthine;

3-[2-(4-Aminophenyl)ethyl]-1-propyl-8-[(thiophen-2-yl)methyl]xanthine;

3-[2-(4-Aminophenyl)ethyl]-1-propyl-8-[(1*H*-tetrazol-5-yl)methyl]xanthine;

and pharmaceutically acceptable salts, ~~hydrates~~ and prodrugs thereof.

9-11. (Canceled)

12. (Original) A composition comprising a compound of claim 1 in a pharmaceutically acceptable carrier.

13. (Currently amended) A compound of formula (I):

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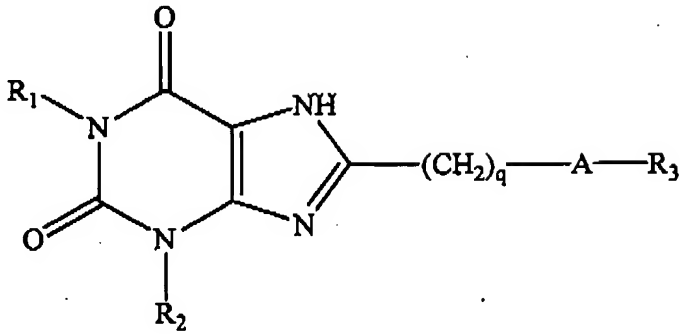
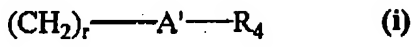


(I)

wherein:

A is a 5- or 6-membered aromatic ring;

R_2 is of the formula (i):



(i)

wherein:

A' is a 6-membered aromatic ring or a heteroaromatic ring containing [[0]] 1 to 4 nitrogen atoms ~~heteroatoms selected from the group consisting of N, O, and S~~;

r is an integer ranging from 1 to 20;

R_4 is selected from the group consisting of NH_2, halo, NHR_8, NR_8R_9, $NHCOR_8$, NR_8COR_9, [[COOH,]] SO_3H and PO_3H_2;

R_3 is selected from the group consisting of H, NH_2, $R_{15}COOH$, wherein R_{15} is an alkylene or alkylidene group having 1 to 8 carbon atoms, and $(CH_2)_tOH$, wherein t is an integer ranging from 1 to 8; halo, NHR_8, NR_8R_9, $NHCOR_8$, NR_8COR_9, SO_3H and PO_3H_2;

q is an integer ranging from 1 to 8; and

R_1 is a C_1-C_8 alkanyl- group, C_2-C_8-alkenyl-, or C_2-C_8-alkynyl- group which is optionally substituted by -CN, $-CH_2NR_6R_7OH$, $-OR_8$, $-NR_6R_7$, $-NHCOR_8$, $-NHCONR_6R_7$, halogen, $-OCOR_8$, $-OCH_2COOH$, $-OCH_2COOR_8$, $-SO_2R_5$, -S-R_5, $-OCH_2$-$CONR_6R_7$, $-OCH_2CH_2OH$, $-SO_2$-CH_2-CH_2-O-COR_8, $-OCH_2$-CH_2-NR_6R_7, $-SO_2$-CH_2-CH_2-OH, $-CONHSO_2R_8$, $-CH_2CONHSO_2R_8$, $-OCH_2CH_2OR_8$, -COOH, $-COOR_8$, $-CONR_6R_7$, -CHO, $-SR_8$, $-SOR_8$, $-SO_2R_8$,

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$-SO_3H$, $-PO_3H_2$, $-SO_2NR_6R_7$, $-OCH_2-CH_2OCOR_8$, -CH=NOH, $-CH=NOR_8$, $-COR_9$, $-CH(OH)R_9$, $-CH(OR_8)_2$, $-CH=CH-R_{10}$, $-OCONR_6R_7$,

R_5 is C_1-C_4-alkyl, optionally substituted by OH, $OCOR_8$, NH_2, NR_6R_7 or $NHCOR_8$,

R_6 and R_7 [[– R_8]] are each independently hydrogen, an optionally substituted C_{3-6}-cycloalkyl group, a branched or unbranched alkyl-, alkenyl- or alkynyl group having up to 10 carbon atoms, which may optionally be substituted by hydroxy, phenyl, substituted phenyl, amino~~, amino substituted with C_1-C_8 alkyl~~, or it denotes $-(CH_2)_m$—NHCOOR$_8$ wherein m=1, 2, 3 or 4;

R_8 is hydrogen, C_1-C_8-alkyl or C_2-C_8-alkenyl or C_2-C_8-alkynyl optionally substituted with CO_2H, a benzyl- or phenyl- group, which is optionally mono- or polysubstituted by OCH_3;

R_9 is C_1-C_8-alkyl or C_2-C_8-alkenyl or C_2-C_8-alkynyl optionally substituted with CO_2H, optionally substituted phenyl, optionally substituted benzyl, C_3-C_6-cycloalkyl, and

R_{10} is –COOR$_8$, $-CH_2OR_8$, $-CONR_6R_7$, hydrogen, C_1-C_3-alkyl, optionally substituted phenyl, $--CH_2NR_6R_7$;

and pharmaceutically acceptable salts, ~~hydrates~~, and prodrugs thereof.

14. (Previously presented) The compound of claim 13, wherein A is phenyl.

15. (Previously presented) The compound of claim 13, wherein A' is phenyl.

16. (Currently amended) The compound of claim 13, wherein:

A is phenyl;

A' is phenyl;

r is 2;

R_4 is selected from the group consisting of NH_2, [[COOH]], $NHCOR_8$, and SO_3H;

R_3 is selected from the group consisting of H, NH_2, halo, SO_3H, and $NHCOR_8$;

q is 1; and

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R_1 is a C_1-C_8 alkanyl group optionally substituted by $-OR_8$, $-NR_6R_7$, or $-SO_3H$.

17. (Currently amended) The compound of claim 13, wherein said compound is selected from the group consisting of:

3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-propylxanthine;

3-[2-(4-Aminophenyl)ethyl]-1-propyl-8-(4-sulfonoxybenzyl)xanthine;

3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(3-methoxypropyl)xanthine;

3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(3-dimethylamino)propylxanthine;

3-[2-[4-(6-Aminohexanoyl)aminophenyl]ethyl]-8-benzyl-1-propylxanthine;

8-Benzyl-1-propyl-3-[4-(4-sulfonoxyphenyl)butyl]xanthine;

8-Benzyl-1-propyl-3-[2-(4-sulfonoxyphenyl)ethyl]xanthine;

3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(3-sulfonoxypropyl)xanthine;

3-[2-(4-Aminophenyl)ethyl]-8-(4-fluorobenzyl)-1-propylxanthine;

8-(2-Acetaminobenzyl)-3-[2-(4-aminophenyl)ethyl]-1-propylxanthine;

8-(2-Aminobenzyl)-3-(2-phenylethyl)-1-propylxanthine;

~~8-Benzyl-3-[2-(3-carboxyphenyl)ethyl]-1-propylxanthine;~~

3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(8-sulfonoxyoctyl)xanthine;

3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(5-sulfonoxypentyl)xanthine;

3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(5-sulfonoxypentyl)xanthine; and

pharmaceutically acceptable salts, ~~hydrates~~ and prodrugs thereof.

18. (Previously presented) A composition comprising a compound of claim 13 in a pharmaceutically acceptable carrier.

19. (New) A compound selected from the group consisting of:

8-Benzyl-3-[2-(3-carboxyphenyl)ethyl]-1-propylxanthine;

3-[2-(2-carboxyphenyl)ethyl]-8-(3-fluorobenzyl)-1-propylxanthine;

3-[2-(2-carboxyphenyl)ethyl]-8-(3-nitrobenzyl)-1-propylxanthine;

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3-[2-(2-carboxyphenyl)ethyl]-1-propyl-8-[(2-pyridyl)methyl]xanthine; and

3-[2-(2-carboxyphenyl)ethyl]-1-propyl-8-[(2-pyridyl)methyl]xanthine;

and pharmaceutically acceptable salts and prodrugs thereof.

20. (New) A composition comprising a compound of claim 19 in a pharmaceutically acceptable carrier.

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REMARKS/ARGUMENTS

Claims 1-8 and 12-18 are pending in the subject application. Claims 1-8 and 12-18 presently stand rejected. Claims 1, 8, 13, 16, and 17 have been amended by the present amendment. New claims 19 and 20 have been added by the present amendment. No new matter is added. Therefore, upon entry of the present amendment, claims 1-8 and 12-20 will remain pending in the subject application. Reexamination and reconsideration of the claims are respectfully requested in view of these amendments and the following remarks. The Examiner's comments in the Office Action are addressed below in the order set forth therein.

The Rejection of Claims 1-4, 12-14, and 18 under 35 U.S.C. § 112, Second Paragraph, Should Be Withdrawn

Claims 1-4, 12-14, and 18 have been rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More particularly, the Office Action asserts that in the A' definition in claim 1, O and S are now impossible because a 6-membered heteroaromatic ring cannot contain either O or S.

Applicants have amended claim 1 and claim 13 by removing O and S from the definition of A' and by clarifying that A' can be a 6-membered aromatic ring or a heteroaromatic ring containing 1 to 4 nitrogen atoms. Applicants respectfully submit that claim 1 and claim 13 are in condition for allowance and respectfully request the same. Claims 2-4, and 12 depend from claim 1, and claims 14 and 18 depend from claim 13. Because claims 1 and 13 are believed to be in condition for allowance, dependent claims 2-4, 12, 14 and 18 also are believed to be in condition for allowance and Applicants respectfully request the same.

The Rejection of Claims 1-7,12-16, and 18 under 35 U.S.C. § 112, First Paragraph, Should Be Withdrawn

Claims 1-7, 12-16, and 18 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. The Office Action lists four

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points (A-D) for rejecting the claims. Each point is addressed below in the order it appears in the Office Action:

A. The Office Action asserts that the removal of "it denotes" from the R_6 definition introduces new matter by changing its role. Applicants have amended claim 1 and claim 13 by inserting the phrase "it denotes" immediately preceding the term "— $(CH_2)_m$—$NHCOOR_8$." The portion of claim 1 in question has now been returned to its original form and claim 13 has been amended to be consistent with the language of claim 1 as originally filed. Accordingly, Applicants submit that the present amendment renders moot the rejection of claim 1 and claim 13 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement and respectfully request that the rejection of claim 1 and claim 13 as it relates to the phrase "it denotes" be withdrawn at this time.

B. The Office Action asserts that the amino substituted by C_{1-8} is new matter. Applicants have amended claim 1 and claim 13 by deleting the reference to "amino substituted with C_1-C_8 alkyl...." Applicants submit that the present amendments render moot the rejection of claim 1 and claim 13 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement and respectfully request that the rejection of claim 1 and claim 13 as it relates to the phrase "amino substituted with C_1–C_8 alkyl" be withdrawn at this time.

C. The Office Action asserts that the inclusion of R_8 into the definition list for R_6 expands the definition of R_8 and allegedly is new matter. Applicants have amended claim 1 and claim 13 by defining R_8 as it was defined in the claims as originally filed. Support for this amendment can be found on page 9 of the application as filed and in original claim 1. No new matter has been added. Applicants respectfully submit that the present amendments render moot the rejection of claims 1 and 13 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement and respectfully request that the rejection of claim 1 and claim 13 as it relates to the definition of R_8 be withdrawn at this time.

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D. The Office Action asserts that the new choice of R_4 as COOH is allegedly new matter. Without acquiescing to the Examiner's comments, Applicants have amended claims 1, 13, and 16 by deleting the variable "COOH" from the definition of R_4 therein. Applicants also have amended claim 17 by deleting reference to the compound named 8-benzyl-3-[2-(3-carboxyphenyl)ethyl]-1-propylxanthine, in which R_4 is COOH. Accordingly, Applicants submit that the present amendments render moot the rejection of claims 1, 13, and 16 as allegedly failing to comply with the written description requirement and respectfully request that the rejection of claims 1, 13, and 16 as it relates to the choice of R_4 as COOH be withdrawn at this time.

Applicants submit that claims 1, 13, 16, and 17 as currently amended are in condition for allowance and respectfully request the same. Because claims 1 and 13 are believed to be in condition for allowance, dependent claims 2-7, 12, 14-15, which depend from claims 1 and 13, also are believed to be in condition for allowance and Applicants respectfully request the same.

The Rejection of Claims 1-8 and 12-18 under 35 U.S.C. § 112, First Paragraph, Should Be Withdrawn

Claims 1-8 and 12-18 have been rejected under 35 U.S.C. § 112, first paragraph, under the contention that the specification allegedly does not provide enablement for hydrates. Without acquiescing to the Patent Office's contention, Applicants have amended claims 1, 8, 13, and 17 by deleting the term "hydrates" therefrom. Applicants reserve the rights to file one or more continuation applications directed to the subject matter deleted from claims 1, 8, 13, and 17. Applicants respectfully submit that the present amendments render moot the rejection of claims 1-8 and 12-18 under 35 U.S.C. § 112, first paragraph, under the contention that the specification allegedly does not provide enablement for hydrates and request that this rejection be withdrawn.

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The Provisional Rejection of Claims 1-8 and 12-18 for Double Patenting Should Be Withdrawn

Claims 1-8 and 12-18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending application serial no. 10/861,677 (hereinafter "the '677 application) for the reasons stated in the Office Action. Without acquiescing to the grounds of the double patenting rejection, Applicants note that the copending applications are still in the process of examination. Thus, it is not yet known which of these applications will be the first to be allowed for issuance as a patent. Should the copending '677 application be the first to be in condition for allowance, Applicants will, upon notification to this effect, either argue the double-patenting rejection or timely file a terminal disclaimer in the present application. Applicants therefore respectfully submit that they have responded appropriately to this provisional rejection and request that this rejection be withdrawn at this time.

New Claims

New claims 19 and 20 have been added by the present amendment. New claims 19 and 20 are directed to the compound 8-benzyl-3-[2-(3-carboxyphenyl)ethyl]-1-propylxanthine; 3-[2-(2-carboxyphenyl)ethyl]-8-(3-fluorobenzyl)-1-propylxanthine; 3-[2-(2-carboxyphenyl)ethyl]-8-(3-nitrobenzyl)-1-propylxanthine; 3-[2-(2-carboxyphenyl)ethyl]-1-propyl-8-[(2-pyridyl)methyl]xanthine; and 3-[2-(2-carboxyphenyl)ethyl]-1-propyl-8-[(2-pyridyl)methyl]xanthine and a composition of said compounds in a pharmaceutically acceptable carrier, respectively. Support for new claims 19 and 20 can be found in pages 11-12, and Example 12, pages 27-28, of the application as filed and in original claims 9 and 12. No new matter has been added. Applicants submit that new claims 19 and 20 are in condition for allowance and respectfully request the same.

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CONCLUSION

In view of the aforementioned amendments and remarks, Applicants respectfully submit that the rejections of the claims under 35 U.S.C. §112, first paragraph, and §112, second paragraph, are now overcome. Applicants respectfully submit that this application is now in condition for allowance. Early notice to this effect is solicited. If in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject Application, the Examiner is invited to call the undersigned.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

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